

Serial No. 08/067,140

Filed: May 25, 1991

Group Art: 3302

1 25. (Amended) An endoscope comprising:
2 a tube having a proximal end and a distal end;
3 a first lens disposed in the distal end of said tube;
4 [a second lens disposed in the distal end of said tube proximate
5 the first lens;]
6 a photodetector disposed proximate ^{AB} said second lens in the distal
7 end of said tube; and ^{HB}
8 a first control rod disposed in said tube and coupled to a first
9 one of said first lens and said photodetector, said first control rod
10 for moving the first one of said first lens and said photodetector in
11 a first direction along a longitudinal axis of said tube.

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1 26. (Amended) The endoscope of Claim 25 further comprising a second
2 control rod coupled to a second one of said first lens and said
3 photodetector, said second control rod for moving the second one of
4 said first lens and said photodetector in a first direction along a
5 longitudinal axis of said tube.

1 27. (Amended) The endoscope of Claim 26 further comprising:
2 a photodetector frame slidably disposed in the distal end of said
3 tube wherein [in which] said photodetector is disposed[,] in said
4 photodetector frame [slidably disposed in said tube] and [coupled to]
5 said second control rod is coupled to said photodetector frame;

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6 a first control means, coupled to said first control rod, for
7 moving said first control rod; and
8 a second control means, coupled to said second control rod, for
9 moving said second control rod

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contd
28. [Amended] The endoscope of Claim 26 further comprising a handle
2 coupled to the proximal end of said tube wherein said first and second
3 means for moving said first and second control rods are disposed
4 [about] on said handle.

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31. (Amended) The endoscope of Claim 30 wherein said handle is
provided having a cavity region and said light source comprises an
3 illumination assembly disposed in [a] the cavity region of said
4 handle.

Please add the following new claims:

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34. An endoscope comprising:
2 a tube having a proximal end and a distal end;
3 a handle, having a cavity region, said handle coupled to the
4 proximal end of said tube;
5 a bi-directional motor disposed in the cavity of said handle;
6 a first lens slidably disposed in the distal end of said tube;

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7 a photodetector disposed proximate said first lens in the distal
8 end of said tube;

9 a control rod having a first end and a second end, said control
10 rod disposed in said tube with the first end of said control rod
11 coupled to a first one of said first lens and said photodetector; and

12 a coupling apparatus coupled between the second end of said
13 control rod and said bi-directional motor.

1 35. The endoscope of Claim 34 further comprising a second control rod
2 coupled to a second one of said first lens and said photodetector for
3 moving the second one of said first lens and said photodetector in a
4 first direction along a longitudinal axis of said tube.

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1 36. The endoscope of Claim 35 further comprising:

2 a photodetector frame slidably disposed in the distal end of said
3 tube wherein said photodetector is disposed in said photodetector
4 frame and said second control rod is coupled to said photodetector
5 frame;

6 a first control means, coupled to said first control rod, for
7 moving said first control rod; and

8 a second control means, coupled to said second control rod, for
9 moving said second control rod.

1 37. The endoscope of Claim 36 further comprising:

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2 a second lens disposed between said first lens and said
3 photodetector; and

4 a third lens disposed between an aperture of the distal end of
5 said tube and said first lens.

1 38. The endoscope of Claim 37 further comprising:

2 a plurality of fiber optic rods disposed about said tube, each
3 of said fiber optic rods having a first end and a second end, wherein
4 the second end of said fiber optic rods are terminated at the distal
5 end of said tube.

B³ 1 39. The endoscope of Claim 38 further comprising:

2 a light source coupled to the first ends of each of said fiber
3 optic rods.

1 40. The endoscope of Claim 39 wherein said light source comprises an
2 illumination assembly disposed in a cavity region of said handle.

1 41. An endoscope comprising:

2 a tube having a proximal end and a distal end;

3 a viewing system, disposed in said tube, said viewing system
4 comprising:

5 a first means for providing an image at one of a plurality
6 of preselected magnification levels; and

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7 a second different means for electrically transmitting a focused
8 magnified image to the proximal end of said tube.

1 42. The endoscope of Claim 41 wherein said first means comprises:
2 a first lens;
3 a second lens; and
4 means for moving said first lens relative said second lens to
5 provide a particular one of a plurality^{as} magnification levels.

1 43. The endoscope of Claim 42 wherein said second means comprises:
2 a photodetector slidably disposed in said tube; and
3 means for moving said photodetector relative^{to} said first and
4 second lens such that said photodetector may be placed at a focal
5 plane determined by the distance between a first surface of said first
6 lens and a first surface of said second lens.

1 44. The endoscope of Claim 43 wherein said means for moving said
2 first lens relative said second lens comprises:

3 a first control rod disposed in said tube, said control rod
4 having a first end coupled to a first one of said first and second
5 lenses; and

6 a first bi-directional motor coupled to a second end of said
7 control rod.

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1 45. The endoscope of Claim 44 wherein said means for moving said
2 photodetector relative said first and second lens first lens
3 comprises:

4 a second control rod disposed in said tube, said second control
5 rod having a first end coupled to said photodetector; and

6 a second bi-directional motor coupled to a second end of said
7 second control rod.

1 46. The endoscope of Claim 45 further comprising:

2 a plurality of fiber optic rods disposed about said tube, each
3 of said fiber optic rods having a first end and a second end, wherein
4 the second end of said fiber optic rods are terminated at the distal
5 end of said tube.

1 47. The endoscope of Claim 46 further comprising:

2 a light source coupled to the first ends of each of said fiber
3 optic rods.

1 48. The endoscope of Claim 47 wherein said light source comprises an
2 illumination assembly disposed in the cavity of said handle.

1 49. The endoscope of Claim 48 further comprising:

2 a power source;